

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A data transferring apparatus for transferring liquid ejection data, comprising a decode unit comprising:

a decode circuit which can perform hardware development on liquid ejection data compressed to be capable of line development;

a line buffer for storing said liquid ejection data developed by said decode circuit by word unit; and

a compressed data inputting unit for transferring liquid ejection data compressed to be capable of line development from an external part to said decode circuit;

wherein said line buffer comprises two (2) faces of buffer area in order to store developed data of predetermined words, said liquid ejection data developed by said decode circuit is sequentially stored in a first face of said buffer areas; while said liquid ejection data developed by said decode circuit is sequentially stored in a second face of said buffer areas when said developed data of predetermined words is accumulated, and
——said liquid ejection data developed by said decode circuit is stored in a first face of said buffer areas one word each, while said liquid ejection data already developed in a second face of said buffer areas is simultaneously transferred to an external memory one word each;

means for transferring said liquid ejection data already developed in said buffer areas to said external memory one word each, and both an operation of sequentially storing developed data of one word into a first face of said line buffer and an operation of transferring data already developed in a second face of said buffer areas to said external memory one word each are simultaneously performed per one clock synchronized with an operation clock; and

a data transfer confirming means for confirming by one clock whether or not, when said liquid ejection data of predetermined words is developed in a first face, said

liquid ejection data already developed in a second face has been transferred to aid external memory as much as predetermined words.

2. (Canceled)

3. (Currently Amended) A data transferring apparatus for transferring liquid ejection data as claimed in claim 21, wherein said decode unit comprises a buffer area face changing means for changing a first face of said buffer areas storing liquid ejection data developed by said decode circuit and a second face of said buffer areas of which said developed and stored liquid ejection data is DMA-transferred to said external memory by one clock.

4. (Canceled)

5. (Original) A liquid ejection apparatus comprising a data transferring apparatus for transferring liquid ejection data as claimed in claim 1.

6. (New) A data transferring apparatus for transferring liquid ejection data as claimed in claim 1, wherein means for transferring DMA-transfers said liquid ejection data already developed in said buffer areas to said external memory one word each.

7. (New) A data transferring apparatus for transferring liquid ejection data, comprising a decode unit comprising:

a decode circuit which can perform hardware development on liquid ejection data compressed to be capable of line development;

a line buffer for storing said liquid ejection data developed by said decode circuit by word unit; and

a compressed data inputting unit for transferring liquid ejection data compressed to be capable of line development from an external part to said decode circuit;

wherein said line buffer comprises two (2) faces of buffer area in order to store developed data of predetermined words, said liquid ejection data developed by said decode circuit is sequentially stored in a first face of said buffer areas; while said liquid ejection data developed by said decode circuit is sequentially stored in a second face of said buffer areas when said developed data of predetermined words is accumulated;

said liquid ejection data developed by said decode circuit is stored in a first face of said buffer areas one word each, while said liquid ejection data already developed in a second face of said buffer areas is simultaneously transferred to an external memory one word each, and

means for DMA-transferring said liquid ejection data already developed in said buffer areas to said external memory one word each, and both an operation of sequentially storing developed data of one word into a first face of said line buffer and an operation of DMA-transferring data already developed in a second face of said buffer areas to said external memory one word each are simultaneously performed per one clock synchronized with an operation clock.

8. (New) A data transferring apparatus for transferring liquid ejection data as claimed in claim 7, wherein said decode unit comprises a buffer area face changing means for changing a first face of said buffer areas storing liquid ejection data developed by said decode circuit and a second face of said buffer areas of which said developed and stored liquid ejection data is DMA-transferred to said external memory by one clock.

9. (New) A data transferring apparatus for transferring liquid ejection data as claimed in claim 7 or claim 8, wherein said decode unit comprises a data transfer confirming means for confirming by one clock whether or not, when said liquid ejection data of predetermined words is developed in a first face, said liquid

Application No. 10/649,228
Amendment dated May 16, 2006
After Final Office Action of February 16, 2006

5

Docket No.: 59807-RCE (47793)

ejection data already developed in a second face has been transferred to aid
external memory as much as predetermined words.